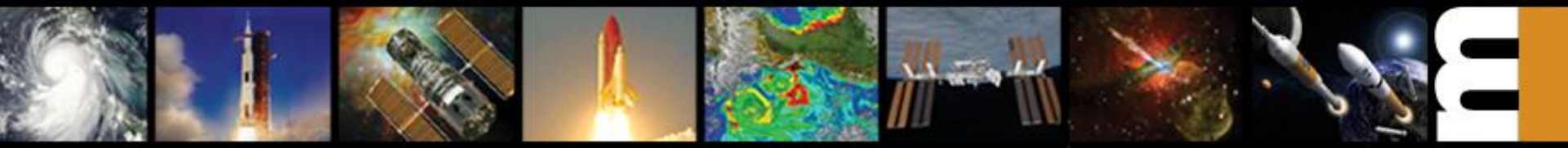
Marshall Space Flight Center

Facilities Master Plan



Marshall Space Flight Center Facilities Master Plan

FMP Development

- **Approved in 2003.**
- **Significantly updated in 2009.**
- **Supplemented by:**
  - Land Use & Site Development Guidelines.
  - 2008 Building Aging Study.
  - 2009 Greenway #1 Study.
- **Supplemented in 2010 to include the Recapitalization & Revitalization Plan.**
- **A “live” document continuously updated as developments require.**

Primary Objective

- The Center will renew and modernize its facilities to sustain its capabilities to meet current and future mission requirements, and to accommodate those capabilities in fewer, more efficient facilities.

Strategies

- **All building designs will incorporate flexibility as a key element to better accommodate future rearrangements as the Center's work force and missions change and/or as new programs are implemented.**
  - Open, collaborative-friendly work environments.
  - Demountable partitions for full-height walls where feasible.
  - Raised floor construction for electrical, telephone and data wiring.
- **Flexibility in design will reduce the cost of future changes.**

Strategies

- ***All employees*** **will be systematically provided with a modern work environment that is conducive to the successful completion of their mission regardless of where they are located.**

- **A space efficiency target of 250 GSF/person will be implemented in office areas of all new building designs and in all buildings that are renovated.**
  - Space efficiency in 14 major office buildings is 350 GSF/person.
  - Space efficiency in newest office building is 253 GSF/person.

General Action Plan

- **A multi-action plan is required if objectives are to be met:**
  - Repair by Replacement.
  - Gut and Redo (Resetting the Clock).
  - Mothball/abandon/demolish.

Repair by Replacement

- **Replace aged, inefficient, high-maintenance buildings with new, efficient, cost effective buildings that are easier to operate and maintain.**
  - Compliance with current codes, regulations, and standards.
  - Eliminate deferred maintenance.
  - Increase space efficiency.
  - Reduce energy cost.
  - Reduce maintenance and operations costs.
  - Improve Center sustainability (LEED Certified).

Gut and Redo (Reset the Clock)

- **When appropriate, "reset the clock" for existing buildings.**
  - All building systems analyzed and revitalized to function as though newly designed and constructed.
  - Comply with all of current codes, regulations, and standards including fire and life safety, energy efficiency, and LEED.
  - Eliminate deferred maintenance.
  - Increase space efficiency.
  - Reduce energy cost.
  - Reduce maintenance and operations costs.

- ***The effectiveness of "resetting the clock" is dependant on a recognized, defined procedure to re-define the age of a building and its related CRV*.**

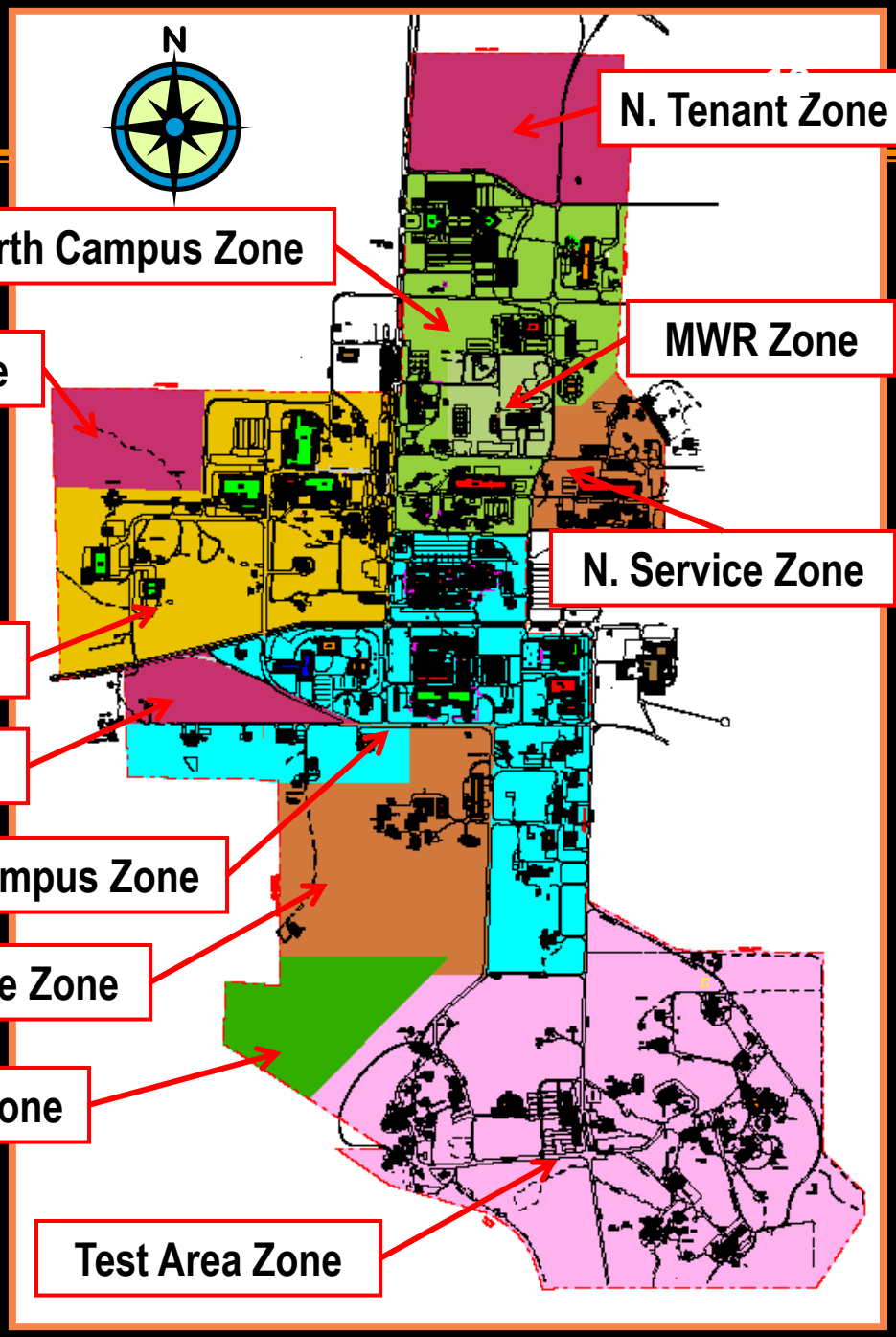
Mothball, Abandon &/or Demolish

- ***Continue to aggressively identify unneeded facilities*** **to be mothballed (reduced energy and maintenance costs), abandoned, and/or demolished (as funds become available).**

Organizing The Campus

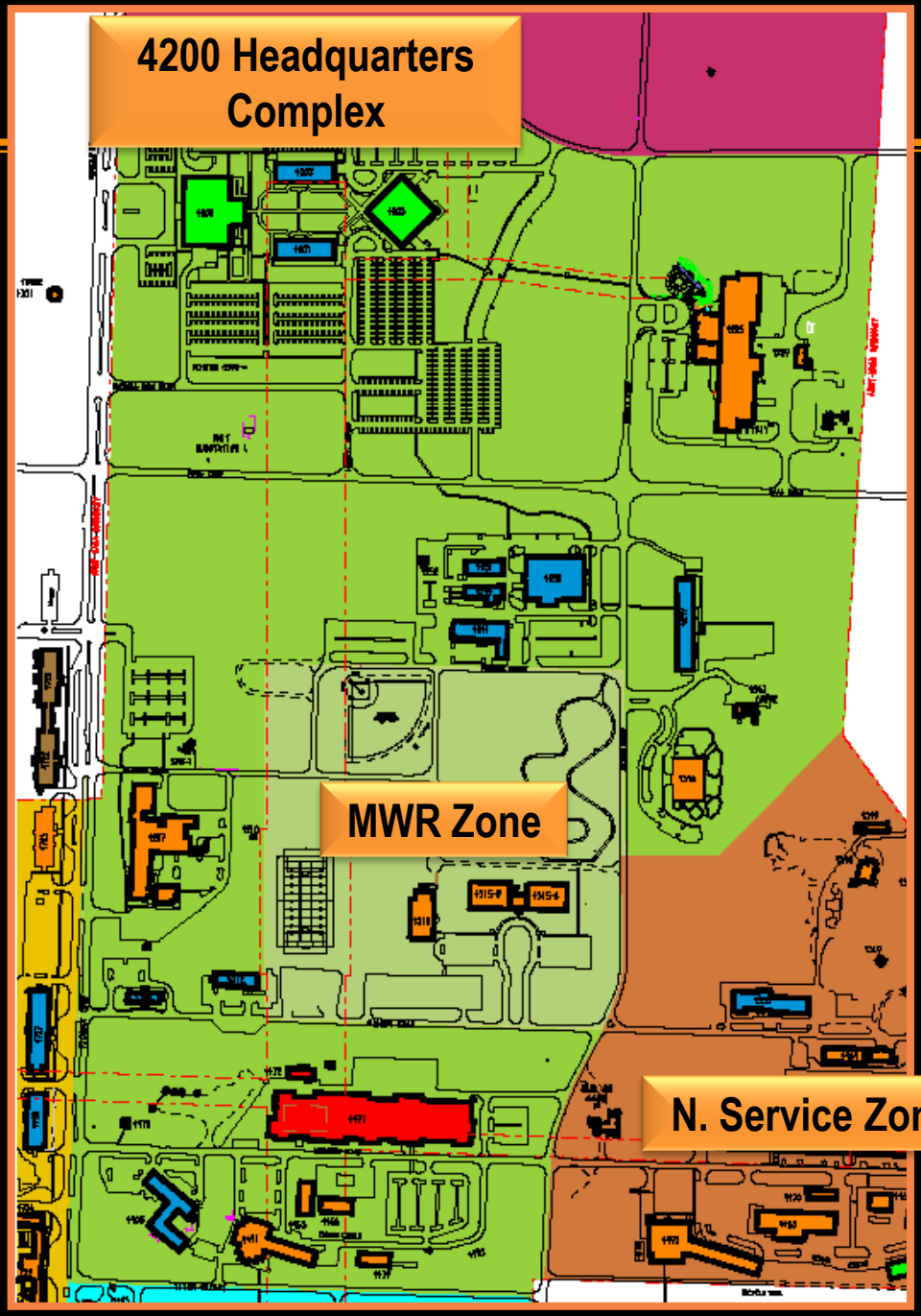
Functional Zones

- North Campus
- MWR Zone
- South Campus
- Research & Development Zone
- North & South Service Zones
- Test Area Zone
- LEED Zone
- "Tenant" Zones
  - North
  - West
  - South



North Campus

- Administrative and Management Functions.
- Directorate and Program Management Functions.
- Some Research Functions.



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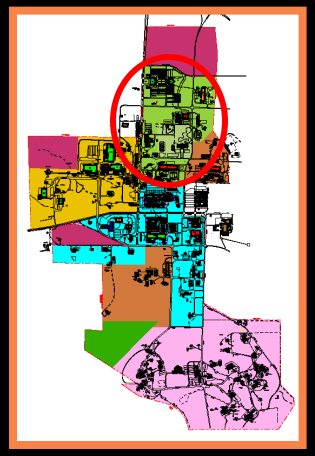

MWR Zone

- **Morale, Welfare & Recreation Zone. Current facilities include:**
  - B4315 – Wellness Center
  - B4316 – Meeting facility
  - Walking trail (FY2009).
  - Softball field (FY2010).
  - Soccer/football field (FY2011).

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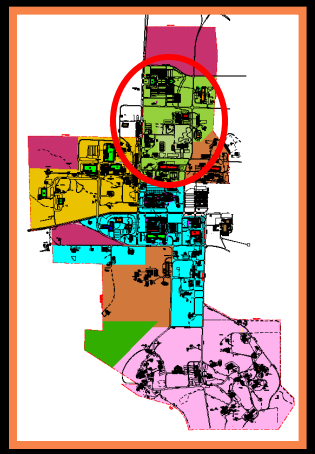
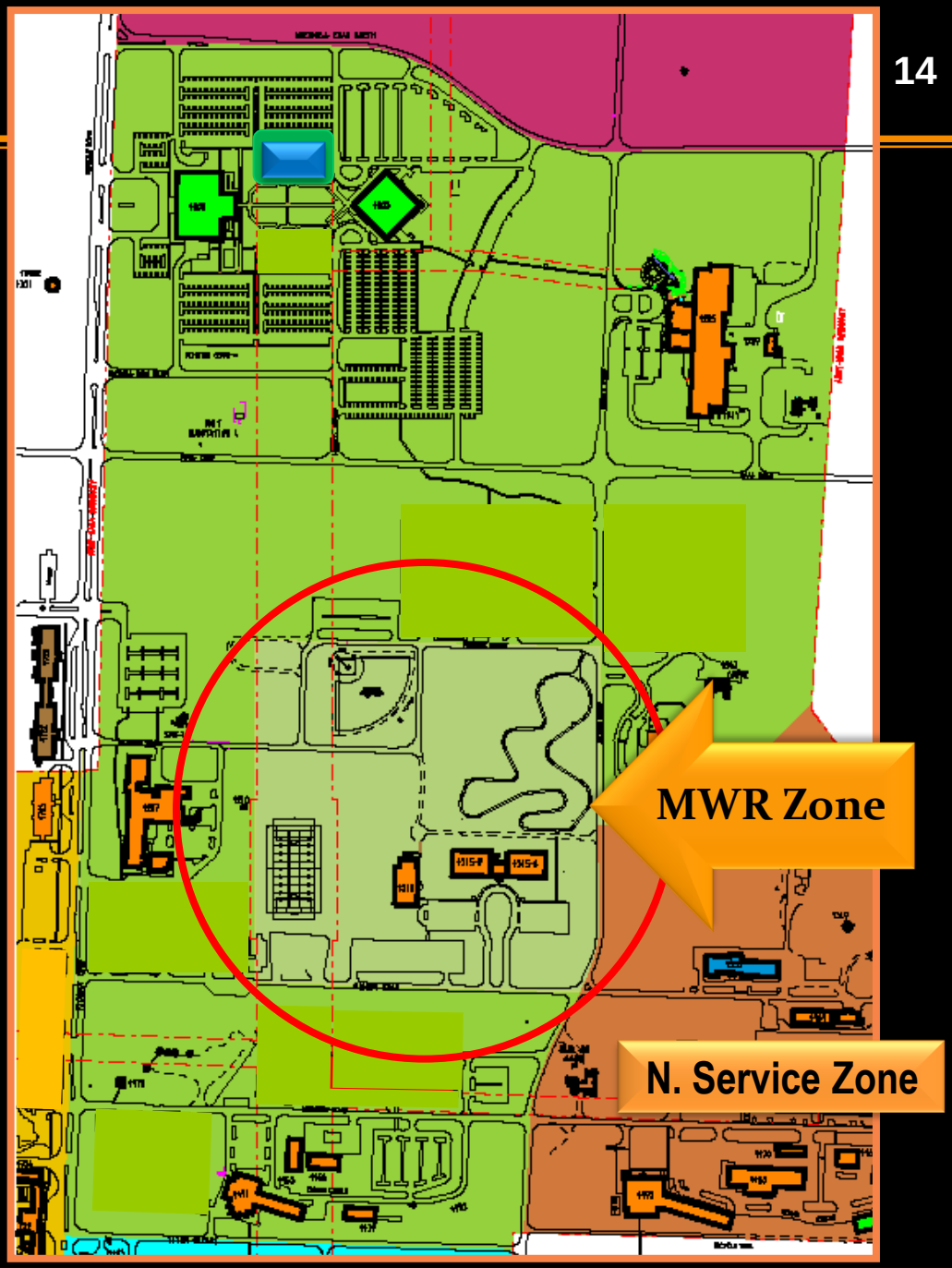
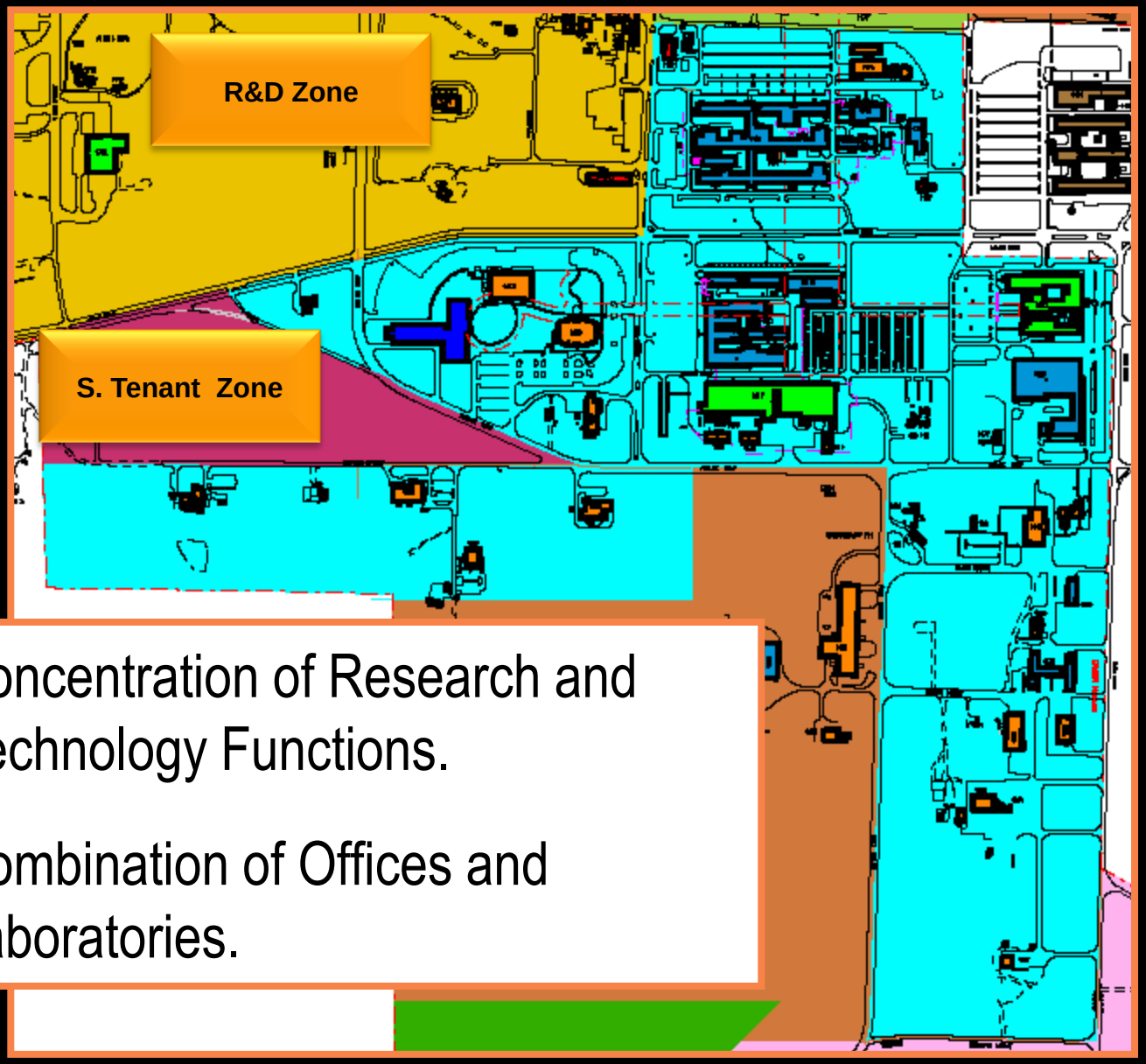




South Campus



- Concentration of Research and Technology Functions.
- Combination of Offices and Laboratories.

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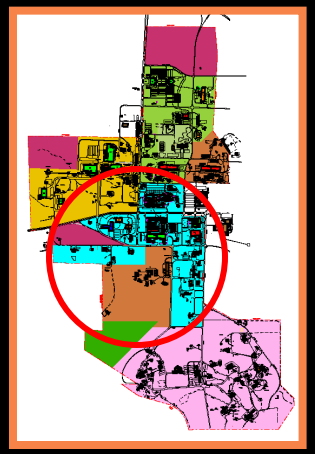
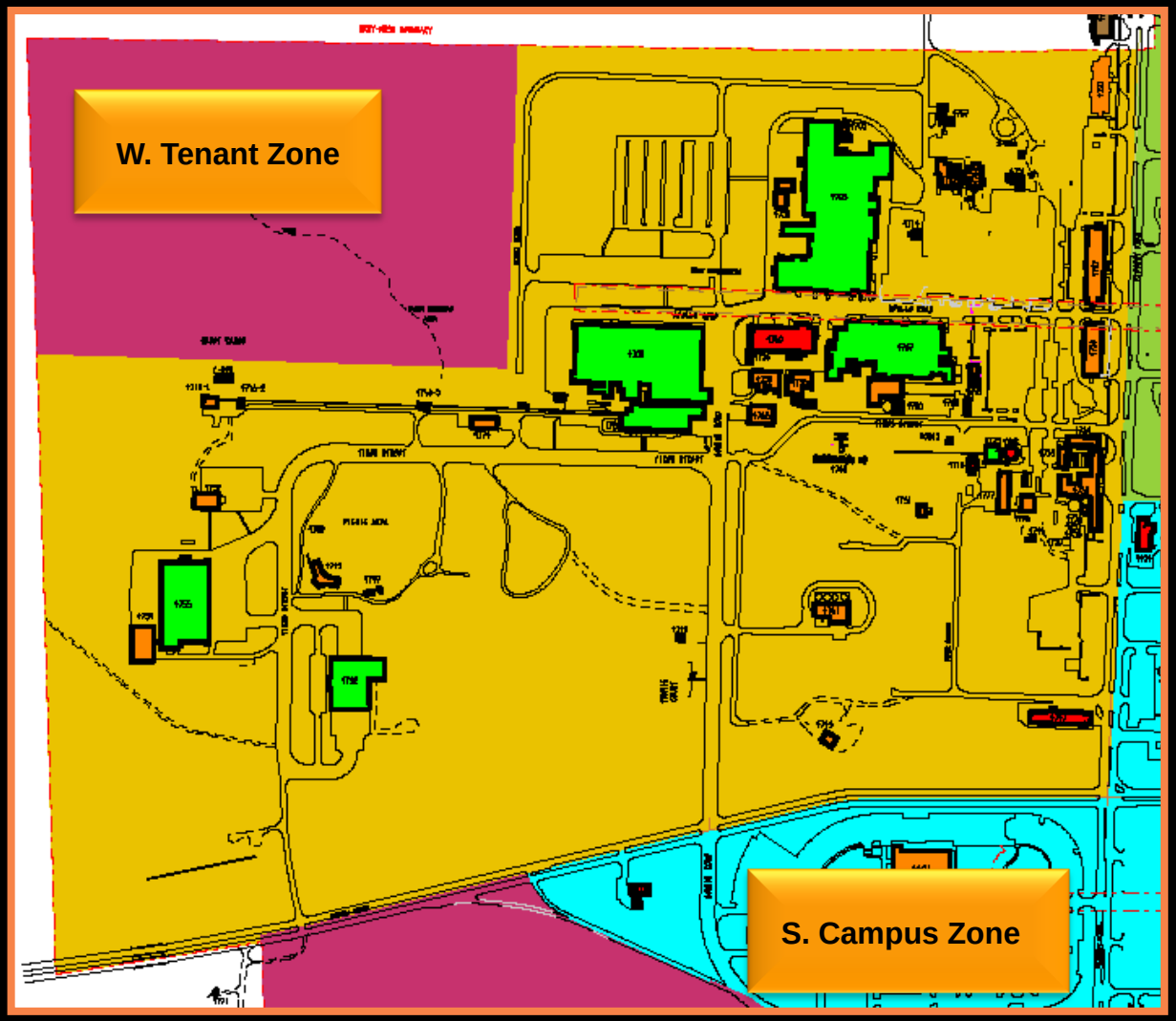


Research & Development Zone

- Concentration of Industrial Type Buildings Including High-bay Assembly and Manufacturing Buildings.



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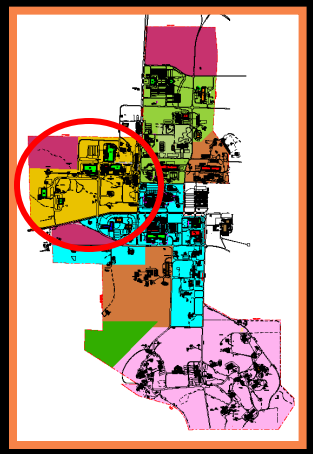

North Service Zone

- Present and Future Service Functions.
  - Maintenance, Shipping, Receiving & Supply.
- Predominantly Building and Vehicle Maintenance Functions.

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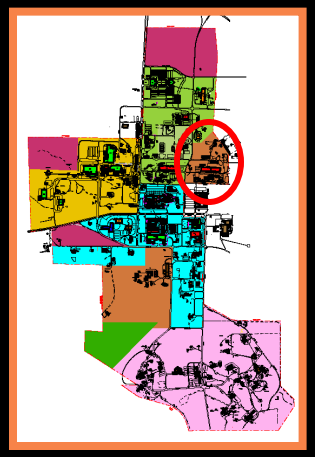

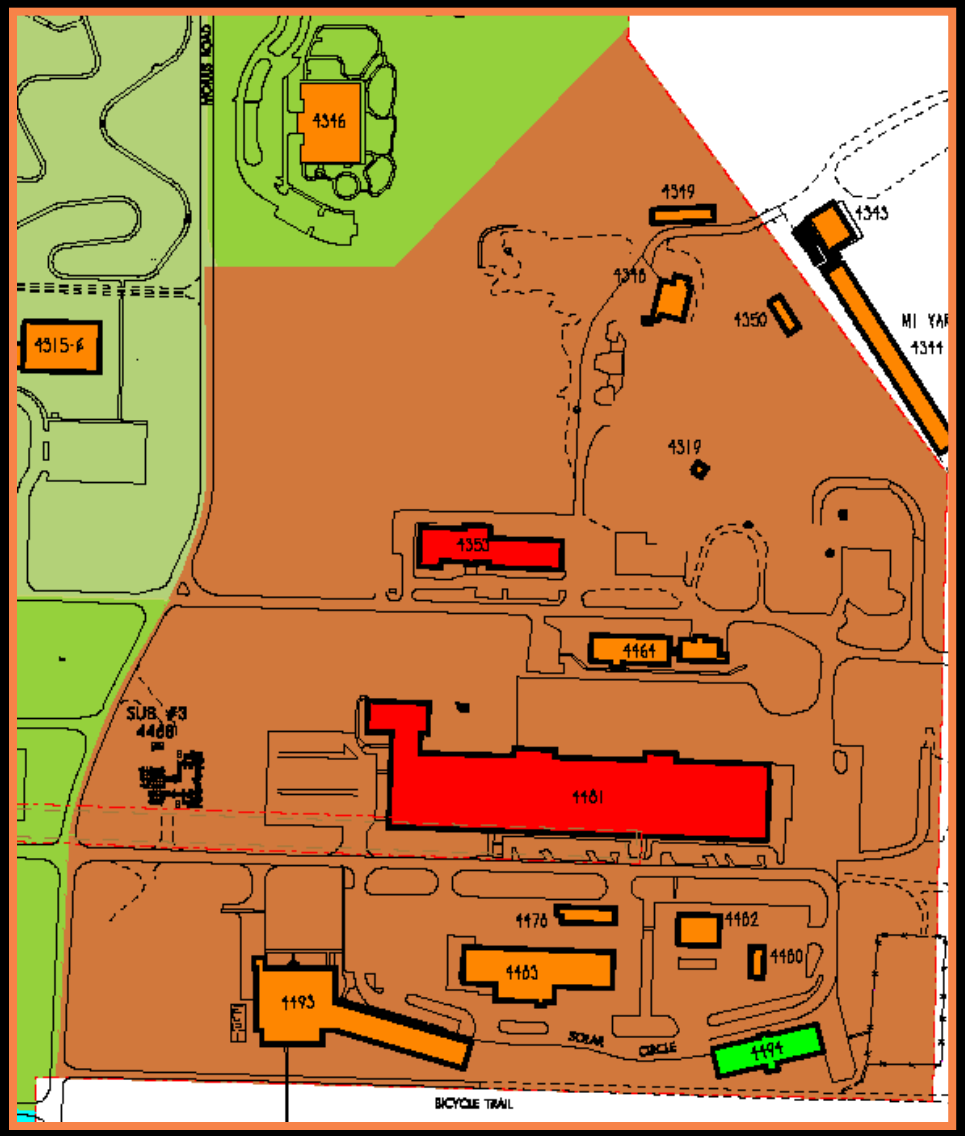

South Service Zone

- Present and Future Service Functions.
- Predominantly Logistics Functions.
  - Shipping, Receiving, & Supply.

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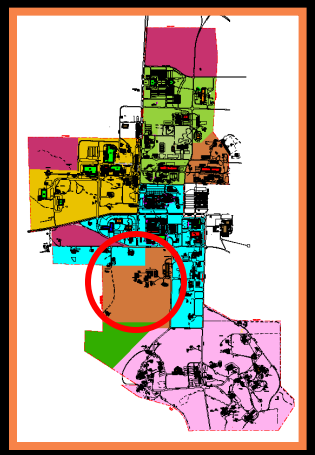
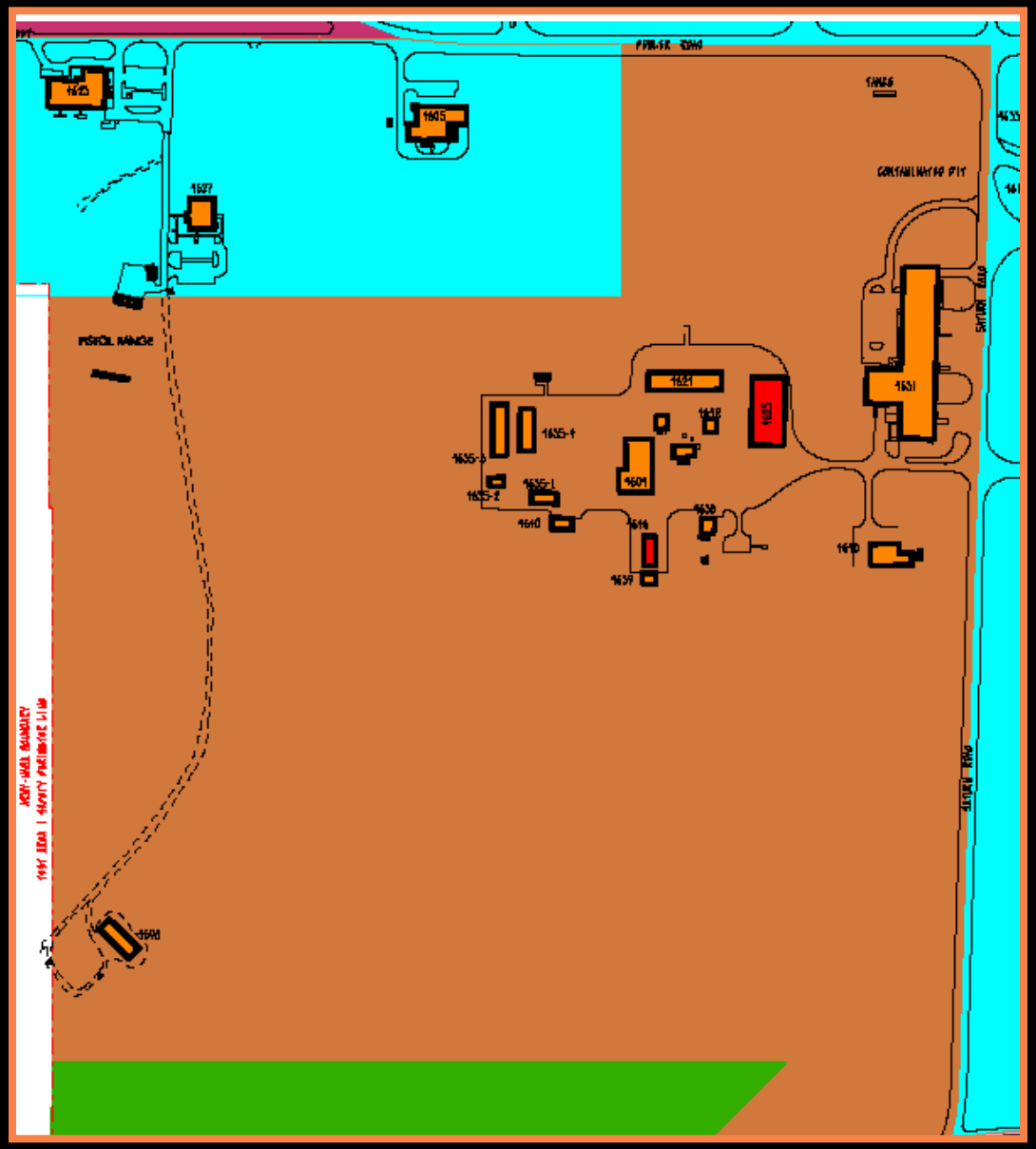
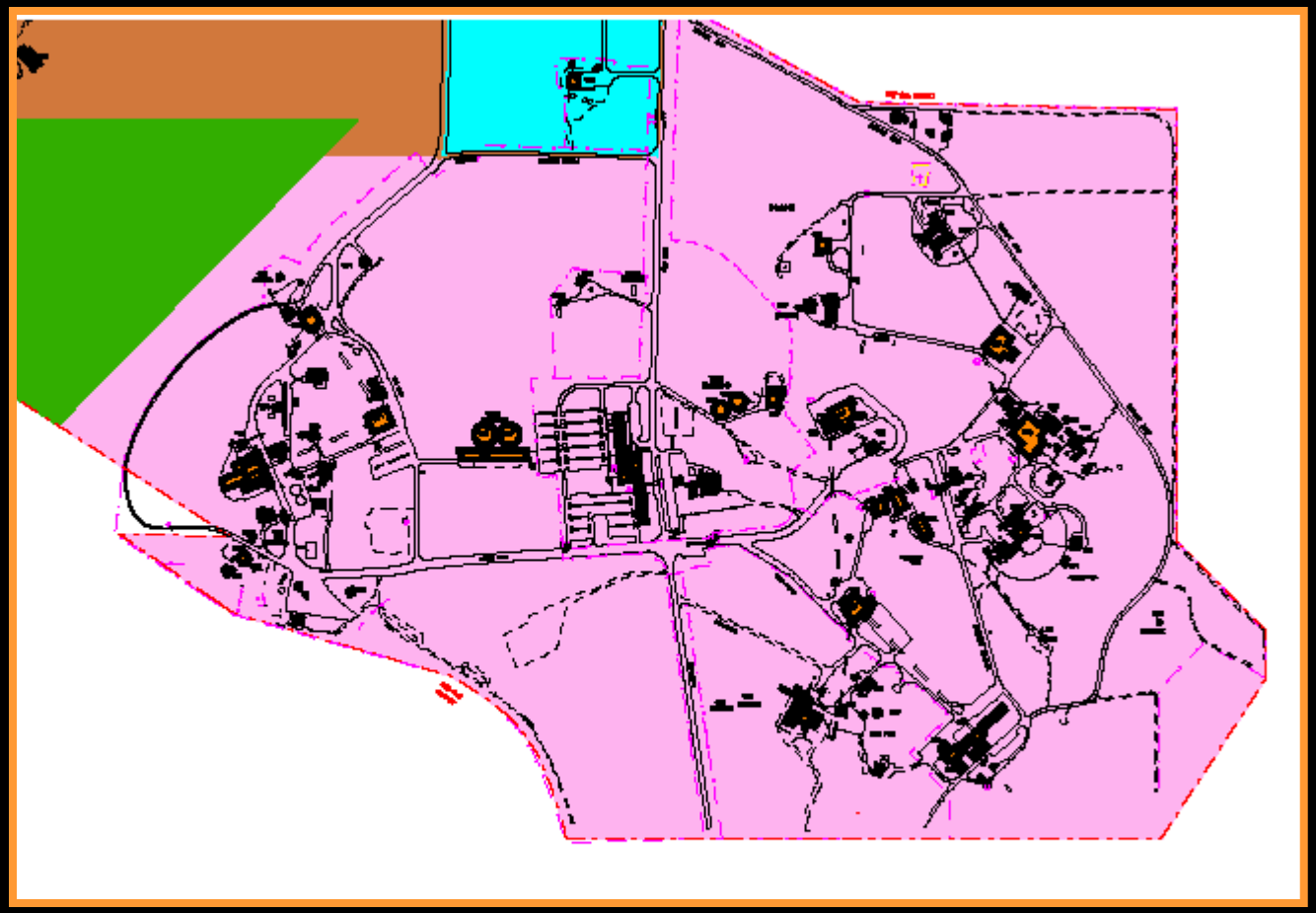




Test Area Zone

- Component testing is the primary function of this zone.
- It contains a significant investment in test stands and related infrastructure.



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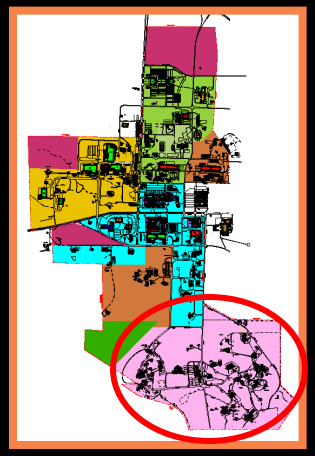
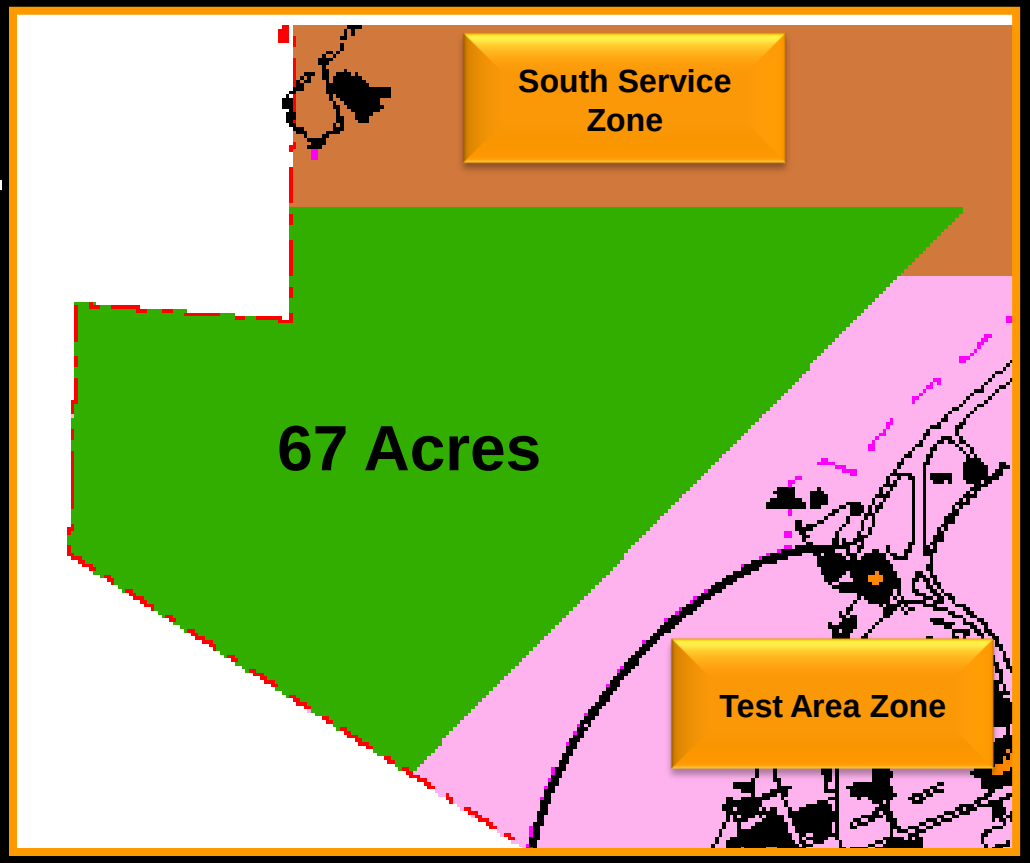


LEED Zone

- Natural state open space reserve.
- Can be expanded if needed for future projects.
- Enhances LEED certification for future projects.



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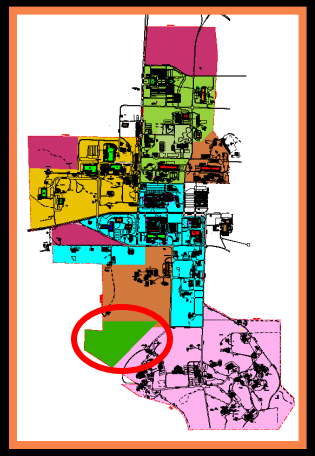
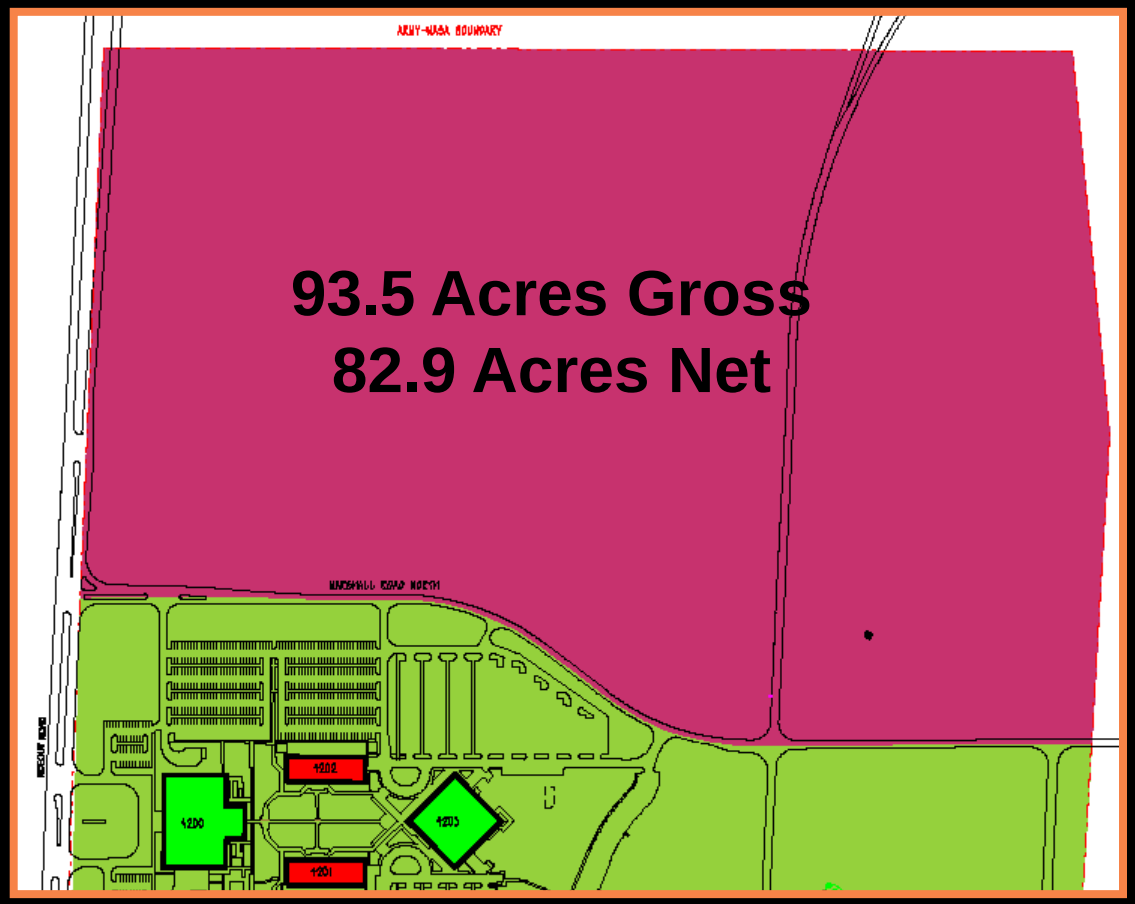


North Tenant Zone

- Proposed for development by outside developer or MSFC contractor under enhanced use lease or similar arrangement.
- For office or similar function only.



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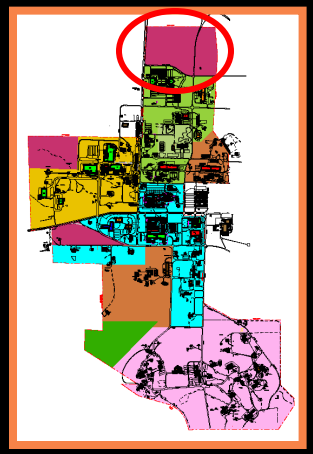
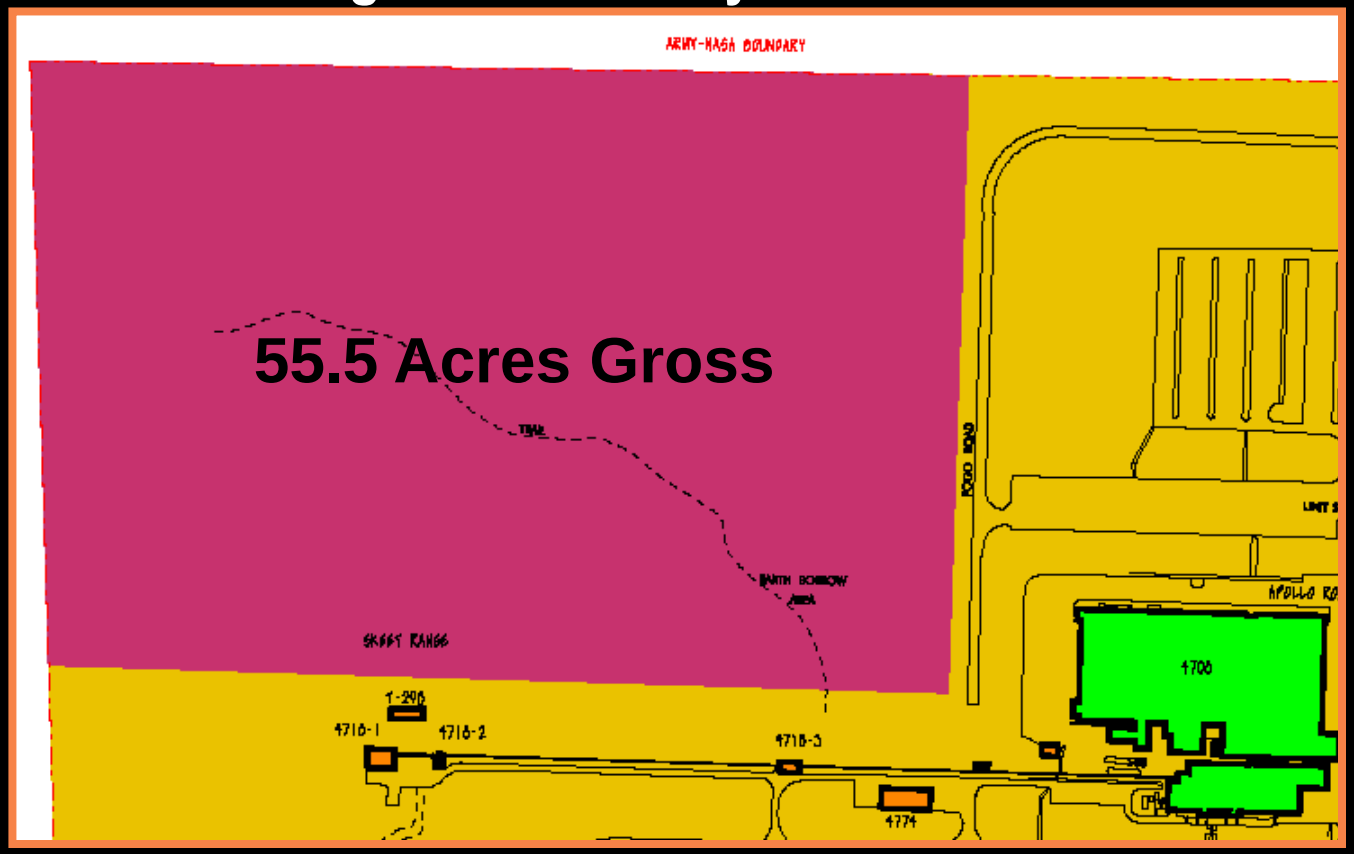


West Tenant Zone

- Proposed for development by outside developer or MSFC contractor under Enhanced Use Lease or similar arrangement.
- For industrial or manufacturing functions only.



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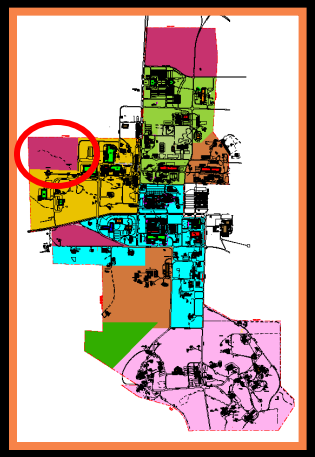

South Tenant Zone

- Proposed for development by outside developer or MSFC contractor under Enhanced Use Lease or similar arrangement.
- For commercial functions only.

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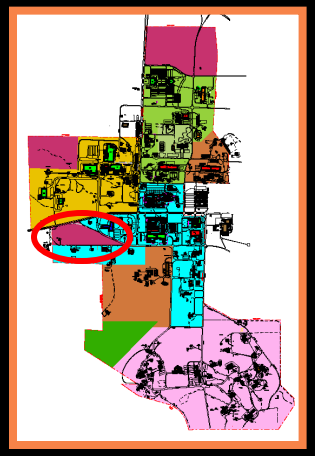
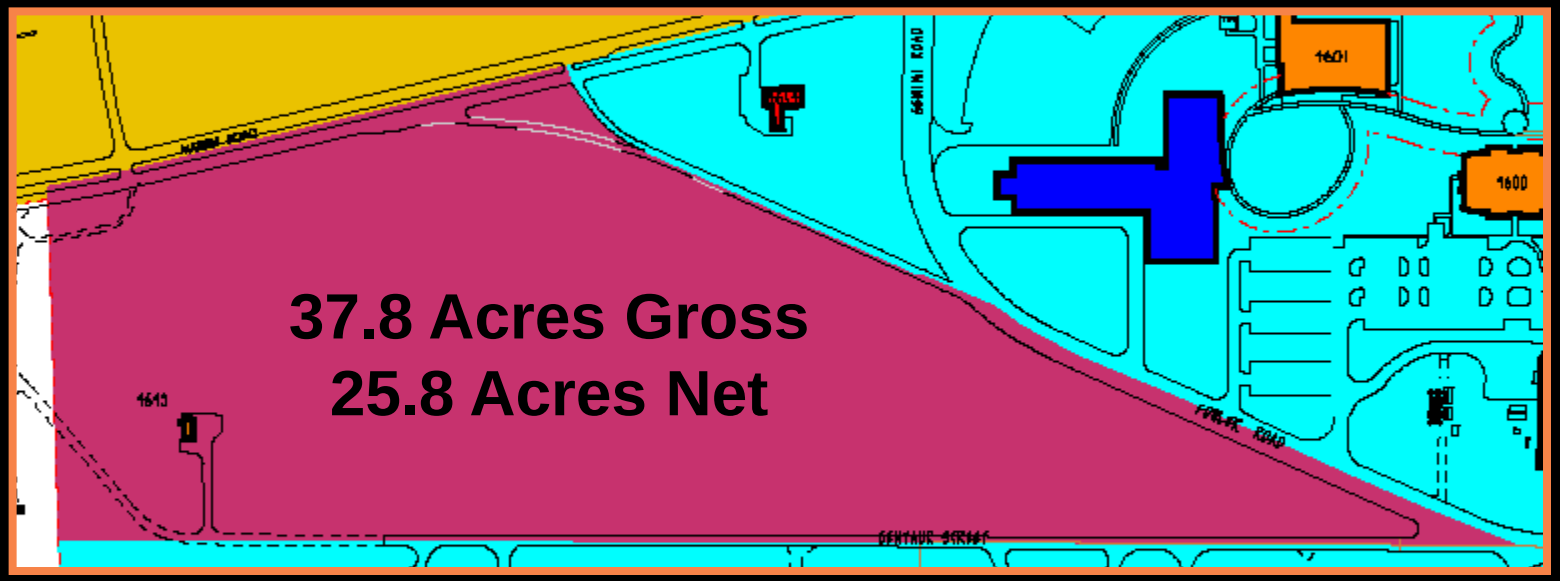
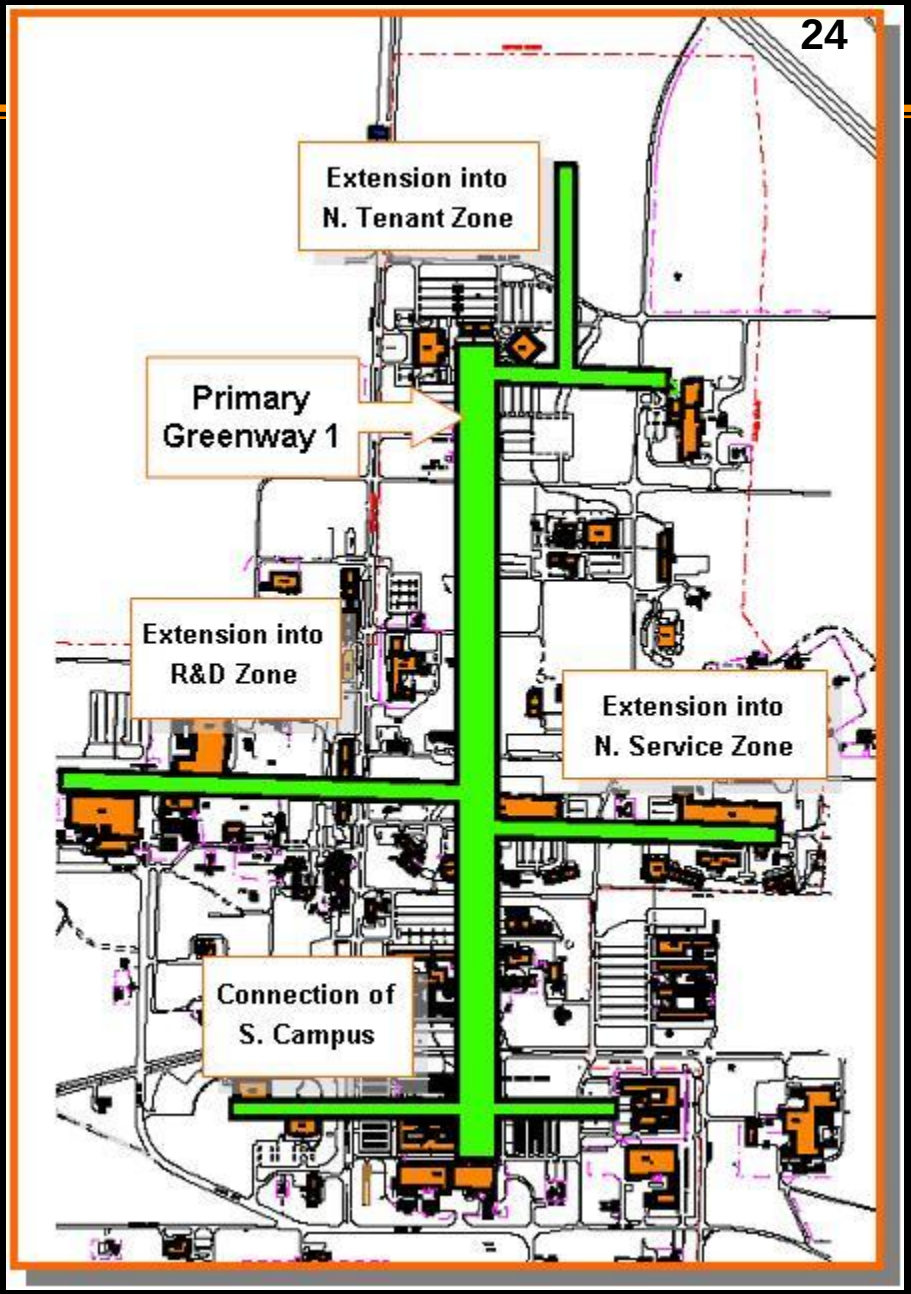
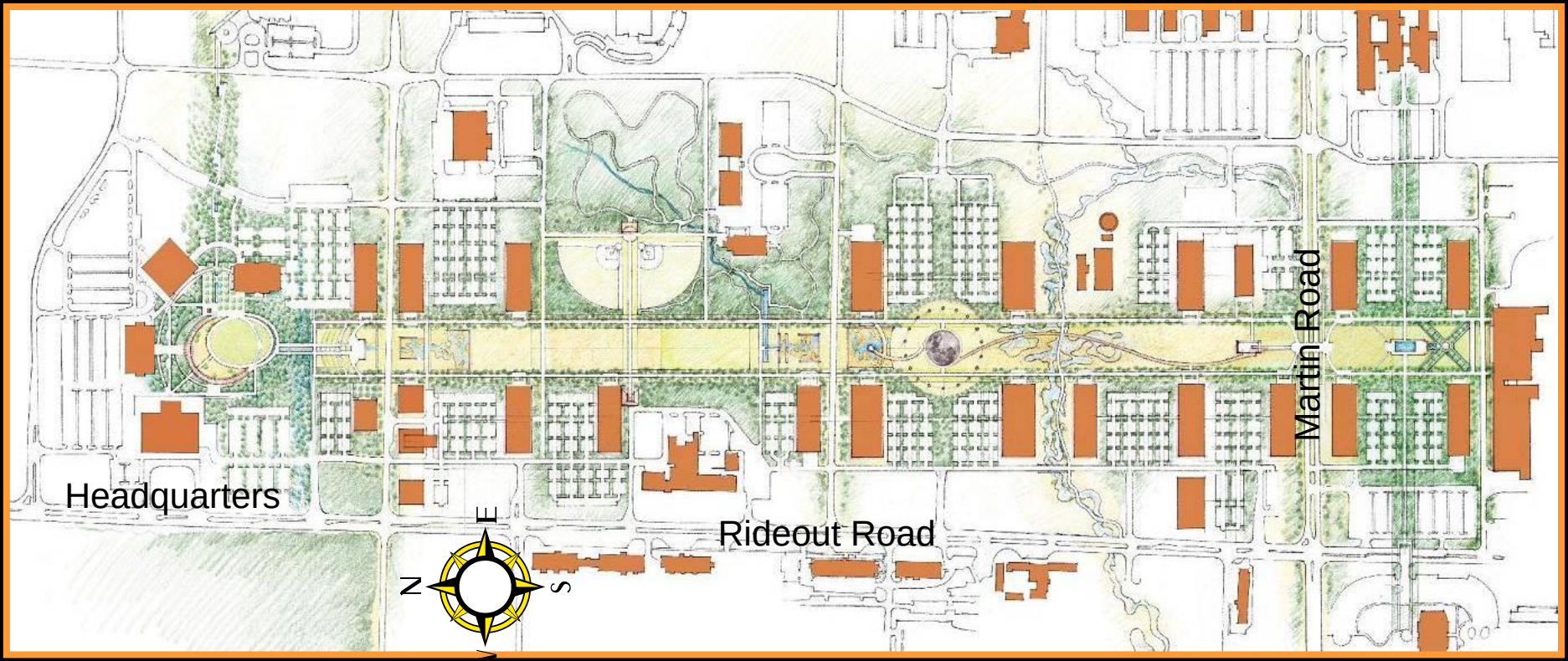




Greenway Schematic

- The “unifier” for the majority of the Center.
- Permits non-automobile traffic between all zones except the Test Area.
- Provides for both permanent and temporary exhibits or events.



Conceptual Design – Primary North/south Greenway #1